

APPENDIX 8

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

Civil Action No. 1:97CV1138

**RHÔNE-POULENC AGRO S.A.,**

**Plaintiff,**

**v.**

MONSANTO COMPANY,

and

DEKALB GENETICS CORPORATION,

**Defendants.**

## DEKALB's Response To RPA's Post-Trial Brief Of Findings Of Fact And Conclusions Of Law

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DEKALB submits the following response to RPA's Post-Trial Brief Of Findings Of Fact And Conclusions Of Law. To prevent repeating what was said in DEKALB's Post-Trial Proposed Findings Of Fact And Conclusions Of Law ("DEKALB's proposed findings/conclusions"), DEKLAB incorporates that paper herein by reference. One issue that is uncontested is that the advisory jury's verdict has no binding effect on the Court. RPA Br. at 7.

**I. DEKALB'S RESPONSE TO RPA'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR THE '497 PATENT**

**A. RPA's Attacks On Comai's Contribution Have No Basis In Fact And/Or Are Irrelevant To Any Judgment In This Case**

As detailed in DEKALB's proposed findings of fact and conclusions of law, the significance of the evidence with regards to Dr. Comai was to establish (1) that much of what RPA claims to be the contributions by its alleged joint inventors was already well-known because of Dr. Comai's publications, and (2) the only aspect of those alleged contributions arguably not well-known in February 1993 – the two mutations in the double mutant maize gene (the "DMMG") – is solely attributable to Dr. Comai and was not contributed by RPA's purported joint inventors. RPA proposes numerous factual findings with regards to Dr. Comai and Calgene, yet the vast majority of them have nothing to with either of these issues. Such proposed findings which have no bearing on the inventorship issues in this case should not be made by this Court.

In particular RPA's numerous irrelevant proposed findings with regards to Calgene and Comai's work are highly objectionable, as (1) DEKALB had no obligation or motivation to undertake to refute all of those proposed fact findings at trial since they were irrelevant to the inventorship issues in case, (2) fully addressing all factual issues raised in RPA's proposal would

have unduly lengthened the trial with facts that had nothing to do with the ultimate issue of inventorship, and (3) there should be no factual findings concerning Calgene, since RPA effectively excluded Calgene from these proceedings by opposing its attempt to intervene.

On the relevant issue with regards to Comai's originating the mutations in the DMMG, RPA proposes factual findings that (1) the identification of these mutations was routine experimentation (RPA Br. at 9), (2) The idea to combine the two mutations in the DMMG originated with RPA (or the "scientific committee") and not Dr. Comai, and (3) Dr. Comai never discussed plant genes with RPA. As detailed below, there is no support in the record for any of those proposed factual findings.

**1. There Is No Dispute That The Two Mutations In The DMMG Correspond To Mutations Identified To RPA By Dr. Comai**

The evidence was conclusive, and RPA does not dispute, that (1) Dr. Comai isolated CT7 (DeRose Tr. 138, 131; Lebrun Tr. 542; Freysinnet Tr. 666; Comai Tr. 854-57), (2) Dr. Comai identified the Pro to Ser 101 mutation as being responsible for CT7's glyphosate tolerance (Lebrun Tr. 542; Freysinnet Tr. 666-68; Comai Tr. 854-57), (3) Dr. Comai isolated B808 (DeRose Tr. 139; Freysinnet Tr. 668; Comai Tr. 858-59), (4) Dr. Comai identified the Thr to Ile 97 mutation in B808 (Lebrun Tr. 540; Freysinnet Tr. 667, 670-71; Comai Tr. 859-62; DTX 178, and (5) the Pro to Ser 107 and Thr to Ile 102 mutation in the DMMG correspond to the exact mutations identified to RPA by Dr. Comai (Freysinnet Tr. 666-68, 674-75, 687; Lebrun Tr. 543; DTX 1948). Freysinnet conceded:

Q. And do [each bag of seed] contain the Pro to Ser and threonine to isoleucine mutations suggested by Dr. Comai?

A. I mean, we are referring to this seed bag? We are containing the double maize mutant, yes.

Q. And those are the two mutations that Dr. Comai first came up with, correct?

A. It is identical mutation.

Freysinnet Tr. 747.

Moreover, although B808 had three mutations, RPA cannot dispute that Dr. Comai clearly identified the Thr to Ile 97 mutation as the important one. DTX 178 specifically identifies Thr to Ile 97 as the important mutation in B808. Dr. Comai confirmed "[A]s soon as we knew that the site-directed mutagenesis experiment had confirmed that threonine to isoleucine was the change, we communicated that the [Freysinnet]." Comai Tr. 862. Neither DeRose nor Lebrun testified to the contrary. They could not because they had no communications with Dr. Comai. DeRose Tr. 467; Lebrun Tr. 531-32. Moreover, nowhere does Dr. Freysinnet deny that Dr. Comai told him that the Thr to Ile 97 mutation was the important mutation in B808. Instead, he confirms Dr. Comai's testimony. Freysinnet Tr. 669-70

**2. No Evidence Supports RPA's Proposed Facts That Dr. Comai's Identification Of The Two Mutations Was Routine Experimentation**

RPA attempts to denigrate Dr. Comai's work in identifying the two mutations used to make the DMMG as "routine experimentation." RPA Br. at 9. No evidence supports this proposed fact finding. While Freysinnet describes the laboratory procedures followed by Dr. Comai as "classical microbiology technique" (Freysinnet Tr. 596), there is no evidence that the results obtained – the identification of the two mutations ultimately used by RPA and that the skill required to perform the procedures in a manner so that these results were obtainable – were routine. Indeed, Freysinnet admitted that Dr. Comai's result was so highly regarded that "it was published in a very good publication." Freysinnet Tr. 607. Any suggestion by RPA that Dr. Comai's identification of these two mutations was routine and not novel is directly contrary to RPA's theory in this case (that the DMMG was a significant contribution to GA21) and in its previous trade secret case (that the DMMG was a trade secret of great value).



Indeed, RPA's own brief establish the significance of Dr. Comai's work to identify these two mutations as no one but Dr. Comai was able to identify these two mutations despite extensive effort. RPA Br. at 21-22. There, RPA discusses similar work conducted at Monsanto to identify mutations to make in EPSP synthase. RPA argues that the DMMG was significant in part because "Monsanto made millions of mutations in EPSPS genes ... However, Monsanto never made the two mutations that are found in DeKalb's Roundup Ready® Corn." RPA Br. at 21-22. As detailed above, the "two mutations" which RPA suggests Monsanto could not identify and to which RPA ascribes this enormous significance were identified solely by Dr. Comai. This argument by RPA further underscores DEKALB's position that if there was anything "significant" about RD-125 in early 1993 under *Pannu*, *Fina*, *Hess* and *Sewall*<sup>1</sup> in light of what was known in the art, it was the two mutations appearing in the DMMG, and RPA can take no credit for them – they were all Dr. Comai.

Dr. Comai's work was so "non-routine" that RPA itself was never able to do similar work to identify any mutations on its own. RPA had to rely on the extensive, pioneering, work at Calgene and Monsanto for its mutations. When it went to Transgene in 1990 to have Transgene make the mutated DMMG, RPA had no mutations of its own to propose. Of the mutations proposed, one came from Monsanto (the Gly to Ala 101) and the rest came from Comai. DX 1948; Freysinnet Tr. 689-91. Accordingly, any suggestion by RPA that Dr. Comai's identification of the two mutations in the DMMG was routine has not support in the evidence, is contradicted by all of the evidence in the record including that put on by RPA, and is directly contrary to the position advanced by RPA in this litigation.

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<sup>1</sup> *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1351 (Fed. Cir. 1998); *Fina Oil & Chemical Co. v. Ewen*, 123 F.3d 1466, 1473-74 (Fed. Cir. 1997); *Hess v. Advanced Cardiovascular Sys.*, 106 F.3d 976, 981 (Fed. Cir. 1997); *Sewall v. Walters*, 21 F.3d 411, 416-17 (Fed. Cir. 1994).

**3. The Only Evidence In The Record Is That The Idea To Combine The Two Mutations In The DMMG Originated With Dr. Comai**

Dr. Comai testified unequivocally that it was he who first proposed the idea to make the Pro to Ser 101 and Thr to Ile 97 mutations in the same construct at an April 1989 Partnership meeting between Calgene and RPA. Comai Tr. 865-68. This testimony is corroborated by notes prepared by Dr. Comai before the meeting suggesting as an objective work to "combine B808 and CT7" mutations. DTX 1477 at RPA031685; Freysinnet Tr. 677. Dr. Comai's unimpeached testimony was that "by combining, I refer to the process of introducing both mutations in the same gene." Comai Tr. 24. That testimony is further corroborated by the later meeting minutes showing that Calgene would work to "MAKE 'THR 97' TO 'ILE' CHANGE IN ...CT7 - AroA." DTX 1477 at RPA031675; Comai Tr. 866. It is not disputed that subsequent to the meeting, Dr. Comai proceeded to make a double mutant bacteria gene with these two precise mutations. Comai Tr. 864-65.

RPA's only opposition to the fact that Dr. Comai originated the idea to make the two changes in the DMMG is to propose a factual finding that Dr. Comai's suggestion was to combine all three B808 mutations with the CT7 mutation, not just the Thr to Ile 97. RPA Br. at 10. Again, no evidence supports this proposed finding. DeRose and Lebrun were incompetent to testify to what Dr. Comai said at the April 1989 meeting because they were not there and concede never talking to Dr. Comai. DeRose Tr. 467; Lebrun Tr. 531-32. Accordingly, DeRose admitted not knowing where the suggestion came from. DeRose Tr. 342-44.

The only RPA witness competent to testify to this issue was Freysinnet. RPA cites testimony on direct examination where Freysinnet interprets the last page of DTX 1477 as containing a suggestion to combine all three B808 mutations with the CT7 mutation. RPA Br. at 10. But, that testimony defies common sense as Freysinnet, on cross, admitted with regards to

the other two mutations that Dr. Comai did not like one of them and did not know about the other in April 1989. Freysinnet Tr. 677-78. Accordingly when asked the specific question of whether Dr. Comai suggested combining the Pro to Ser 101 mutation in CT7 with just the Thr to Ile 97 mutation in B808, or with all three B808 mutations, Freysinnet confessed that he did not remember.

Q. So is it your testimony, that Luca Comai was going to suggest that you make a gene with the threonine to isoleucine mutation and a mutation that he had already written you that he did not like?

A. That's what he was proposing, yes.

Q. And he wasn't just proposing these two?

A. I don't remember whether he said specifically these two.

Q. If I may then, Dr. Freysinnet, did he suggest just these two or did he suggest three or do you not remember which?

A. The only thing I remember is that he did say to combine two gene, B808 and CT7.

Q. And by that you don't remember whether he meant to combine just the two mutations of threonine to isoleucine and proline to serine or to combine those two with this third mutation he did not like; is that correct?

A. No. I don't remember that.

Q. You don't remember?

A. No.

Freysinnet Tr. 677-78. Dr. Freysinnet, therefore, was forced to admit on cross-examination that he did not know who suggested the specific idea to combine the two mutations that are in the DMMG:

Q. When Luca Comai walked into the meeting, he said combine 808 and CT7 mutants?

A. Yes.

Q. Walking out of the meeting there was a decision to combine these two mutations, correct?

A. That's what came up out of the discussion of the committee, yes.

Q. Do you remember who in the committee decided that these two would be the ones combined?

A. I don't remember among all the member who decided we would pick up this mutation.

Freysinnet Tr. 688.

Accordingly, the only record evidence of who proposed making the two DMMG mutations in the same EPSPS construct is Dr. Comai's corroborated, unequivocal, and unimpeached testimony that it was his idea, and Freysinnet's clear admission that he does not remember. There is no evidence, therefore, to support RPA's proposed factual findings that Dr. Comai only proposed combining all three B808 mutations with the CT7 mutation (RPA Br. at 10), that the two DMMG mutations were "determined by RPA scientists" (RPA Br. at 14), and that Dr. Comai did not participate in the decision to make these mutations (RPA Br. at 14). The only record evidence is that the two mutations made in the DMMG originated solely from Dr. Comai and that the decision to combine them in the same gene is solely attributable to Dr. Comai.

**4. The Only Evidence In The Record Is That The Idea To Use Mutated Maize EPSPS Was Taught By Monsanto In 1988 And Suggested To RPA By Dr. Comai**

RPA is left with the unsupportable argument that the proposed joint inventors' novel idea was to make the two Comai mutations in a maize EPSPS, as opposed to bacteria. RPA Br. at 14-15. But this cannot be a "significant" contribution attributable to RPA under *Pannu*, *Fina*, *Hess*, and *Sewall* because it is undisputed that the idea to use a mutated maize EPSPS to confer glyphosate tolerance was fully disclosed in Monsanto's 1988 EPO publication. DTX 1940;

DeRose Tr. 313-14. The distinction between the DMMG and Monsanto's 1988 Gly to Ala 101 single mutant was the two mutations suggested solely by Dr. Comai.

Moreover, there is no evidence to support a finding that Dr. Comai did not tell RPA about using plant EPSPS. That suggestion was also made at the April 1989 meeting between Calgene and RPA as reflected by the meeting minutes. DTX 1477 at RPA031676. Again, Dr. Freysinnet admits that he does not know who made this suggestion. Freysinnet Tr. 688-89. Dr. Comai, however, testified, corroborated by his lab notebook, that he had thought about using plant EPSP genes as early as 1985. Comai Tr. 879-81. He further testified to discussing this idea with RPA at the April 1989 meeting. Comai Tr. 893-94. Again, the only evidence is that the idea to use a plant gene originated with Dr. Comai, and there is no evidence, much less clear and convincing, corroborated evidence, that it originated with RPA's purported joint inventors.

**5. The Heavy Burden For Corroborating Evidence Rests On RPA, Not Upon Dr. Comai**

RPA argues that Dr. Comai's testimony is not corroborated. RPA Br. at 33-34, n. 4. But the above evidence corroborating Dr. Comai's testimony includes his laboratory notebook, the RPA/Calgene meeting minutes, Dr. Comai's correspondence with Freysinnet, and the testimony of Freysinnet conceding to certain of Dr. Comai's contributions. This evidence is more than sufficient under the rule of reason analysis discussed in *Price v. Symsek*, 988 F.2d 1187, 1195-96 (Fed. Cir. 1993), particularly as none of it is challenged by RPA's witnesses.

But more importantly, the strict corroboration requirement detailed by RPA does not apply to Dr. Comai because he is not a "named party, an employee of or assignor to a named party, or otherwise in a position where he or she stands to directly and substantially gain by his or her invention being found to have priority over the patent claims at issue." *Thompson, S.A. v. Quixote Corp.*, 166 F.3d 1172, 1176 (Fed. Cir. 1999) ("Thus, the corroboration rule is needed

only to counterbalance the self-interest of a testifying inventor against the patentee.”); *see also*, *Eisenberg v. Alimed, Inc.*, 2000 WL 1119743 at \*4 (Fed. Cir. August 8, 2000). Instead, Dr. Comai is a neutral third party as to these proceedings.

Accordingly, as to the testimony provided by Dr. Comai and RPA’s witnesses regarding claimed contributions, the corroboration requirement only applies to RPA’s interested witnesses. Unlike Dr. Comai, they are the ones asserting a claim of inventorship. But as to the key issue of what Dr. Comai told RPA at the April 1989 meeting, there is nothing to corroborate from RPA’s witnesses. DeRose and Lebrun admit that they were not there, and Freysinnet admits that he does not remember. It is hard to corroborate “I don’t remember.” Freysinnet Tr. 678, 688. Moreover, Freysinnet’s reported references to what was proposed by a “scientific committee” are wholly irrelevant without some identification of who made the proposition. People are inventors, not “scientific committees.” There is thus no evidence from RPA’s witnesses, much less corroborated evidence, to support any finding that the idea to combine the two mutations in the DMMG had any origination from or is a contribution by anyone at RPA.

**B. The Prior Art Is Relevant To DEKALB’s Argument That The Purported Joint Inventors Did Not Make A Significant Contribution**

RPA mischaracterizes DEKALB’s argument regarding what was known in the art and then attempts to prove that unmade argument irrelevant. According to RPA, DEKALB is relying on some type of “obviousness” standard under 35 U.S.C. § 103. RPA Br. at 32. To be clear, DEKALB is not asserting “obviousness” under section 103 or any other provision. DEKALB’s argument is simple. RPA’s purported joint inventors had to have made a significant contribution to the claimed transformation events. *Pannu*, 155 F.3d at 1351; *Fina*, 123 F.3d at 1473-74; *Sewall*, 21 F.3d at 416-17. However, by the time the ‘497 patent application was filed, the transformation techniques used by DEKALB were in the prior art and the genetic constructs that

RPA relies upon as the basis for its co-inventorship counterclaim were in the prior art. RPA's personnel cannot be joint inventors because what they contributed was simply not an inventive aspect of the '497 patent when the '497 patent application was filed. The only inventive aspect of the claims is the unique insertion point made using known genetics and a known transformation technique. RPA's purported joint inventors admit that they did not contribute to the creation and identification of the transformation events and their unique insertion points. Thus, they cannot be joint inventors.

**C. RPA's Arguments Regarding Dr. Comai's And Monsanto's Publications Do Not Negate What Dr. Comai and Monsanto Made Known To Those Of Skill In The Art**

With respect to RPA's discussion of Dr. Comai and the 1988 Monsanto publication, RPA Br. at 32-38, RPA again misses the point. Aside from the discussion regarding Dr. Comai in section I.A above, the prior art publications attributable to Dr. Comai and to Monsanto establish that even before 1990 those of skill in the art knew of various genes that would impart some level of glyphosate resistance to plants. Those publications show that those of skill in the art would have understood that Lundquist and Walter's transformation techniques allowed them to use known genes to make for the first time fertile transgenic corn that possessed some level of resistance to glyphosate. The relevance of that fact to the '798 patent is discussed more fully below in section II.

As to the '497 patent, those publications show that the use of transit peptides that worked at least as well as the OTP and mutated maize EPSPS were known years before RD-125 or the DMMG were transferred to DEKALB. That fact is not disputed in RPA's brief. Accordingly, such alleged contributions cannot be considered significant under *Pannu*, *Fina*, *Hess*, and *Sewall*.

**D. DEKALB's 1995 PCT Publication And RPA's 1997 PCT Publication Establish What Was Known In The Art And The Inventive Aspect Of The '497 Patent**

RPA argues that both PCT publications are legally irrelevant under *Pannu v. Iolab Corp.*, 155 F.3d 1344 (Fed. Cir. 1998). RPA Br. at 40. *Pannu* has already been briefed multiple times by DEKALB, including the discussion of *Pannu* in DEKALB's proposed findings/conclusions. Suffice it to stay, DEKALB maintains that RPA's interpretation of *Pannu* is incorrect and that *Pannu* is distinguishable.

In *Pannu*, the Federal Circuit noted that it was "undisputed that the invention was conceived while Link and Pannu were engaged in a collaborative enterprise ...." *Id.* at 1351. Here, the claimed transformation events, i.e., the unique insertion points, were not and could not have been conceived until they were made, identified and shown to work for their intended purpose. However, when that happened, DEKALB and RPA were not engaged in an ongoing collaborative enterprise.

RPA analogizes that the contribution made by its proposed joint inventors of their prior art genetic constructs cannot be discounted any more than "DEKALB's contribution of its 'prior art' transformation, regeneration and breeding steps." RPA Br. at 42. However, RPA's analogy proves DEKALB's point. Lundquist and Walters contributed the plant transformation techniques to the prior art and they are not named as inventors on the '497 patent. Likewise, the contributions alleged by RPA's purported joint inventors were placed in the prior art by the 1995 and 1997 PCT publications<sup>2</sup> and thus RPA's purported joint inventors do not qualify to be named as inventors on the '497 patent. The events claimed in the '497 patent resulted from taking prior

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<sup>2</sup> Indeed, the advisory jury was not permitted to hear that those constructs were placed in the art under 35 U.S.C. § 102(e) before GA21 was even isolated. The '390 patent (DEKALB's Motion for Summary Judgment at Tab B) and the its August 25, 1993 patent application teach those constructs. GA21 was isolated after August 1993. Spencer Tr. 1101-02; PTX 201 at DKB 35003. A similar application disclosure was incorporated by reference into the '497 patent. JTX 1, 26:62-67.



art constructs and inserting them into corn using a prior art technique. The correct inventors are the people that took the prior art and used it to make something new. Under RPA's rationale, if DEKALB took the prior art DMMG construct and made transformations today, RPA's purported joint inventors would have to be named as joint inventors on patent claims directed to the new events because, according to RPA, those constructs were not in the art at the time RPA gave them to DEKALB. Thus, under RPA's reading of *Pannu*, RPA can forever tie-up a former collaborator while everyone else in the world is free to use what RPA deems itself to have contributed to the art.

RPA argues that DEKALB's 1995 PCT publication is irrelevant because, according to RPA, that publication does not disclose the constructs used in the four transformation events of the '497 patent. RPA Br. at 43. However, table four of the '497 patent shows the constructs used to make the GA21, GG25, GJ11, and FI117 events. JTX 1 at 23:63-65 & 24:14-25:2. Those same constructs are disclosed in the 1995 PCT publication. See Proffer Tab 20 at 96, 103, 105-110, 119-20, 150, 167.

## **II. DEKALB'S RESPONSE TO RPA'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR THE '798 PATENT**

RPA's arguments regarding the '798 patent are not actually directed to joint inventorship, but rather to RPA's efforts to have the '798 patent declared invalid – or at least to obtain fact findings that it can later mistakenly attempt to use to bolster an attack on the validity of the '798 patent. RPA's arguments distill to its assertion that the '798 patent does not meet 35 U.S.C. § 112. In essence, RPA admits that it cannot prove joint inventorship if the '798 patent claims are

supported by the '798 patent and hence the identical 1990 BioTechnica application under section 112.<sup>3</sup>

The claims of the '798 patent either are or are not supported under section 112 by the identical patent applications filed on behalf of Lundquist and Walters in 1990 and again in 1995. If the claims are not supported, they are invalid – a determination to be made when the validity of the '798 patent is placed at issue. If the claims are supported, Lundquist and Walters are the sole inventors of those claims. Those are the only two possible alternatives and either way RPA's purported joint inventors cannot be joint inventors of what is claimed in the '798 patent.

**A. RPA's "Conception" Argument Cannot Establish RPA's Joint Inventorship Counterclaim**

RPA first focuses on the issue of conception, arguing that Lundquist and Walters did not conceive of claim 1. RPA Br. at 44-60. That argument is irrelevant in the context of this correction of inventorship case for several reasons.

First, RPA has not pointed to one case that stands for the proposition that the invention reflected in the presumably valid '798 patent claims can be conceived somehow after the patent application has been filed.

Second, RPA has not cited a single case showing that a person can be named as an inventor on a patent when his sole contribution was made after the priority application was filed.

Third, as a matter of law, the 1990 filing of the BioTechnica application on behalf of Lundquist and Walters establishes the conception of everything disclosed in that application. *Hyatt v. Boone*, 146 F.3d 1348, 1352 (Fed. Cir. 1998); *Yasuko Kawai v. Metlesics*, 480 F.2d 880, 885 (CCPA 1973). The relevant portions of that application are set forth in DEKALB's

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<sup>3</sup> RPA's position that it is only attacking the 1990 application under section 112 is nonsensical. The 1990 application and the 1995 continuation application that resulted in the '798 patent are identical.

proposed findings/conclusions. However, in short, Lundquist and Walters taught the art how to make fertile transgenic corn and suggested including a wide variety of genes to impart a wide variety of traits to the new corn. The suggested genes include an EPSP synthase gene to impart resistance to glyphosate. RPA admits that its purported joint inventors did not have any input into the conception by Lundquist and Walters of (1) the method to make fertile transgenic corn or (2) the use of an EPSP synthase gene to make that fertile transgenic corn resistant to glyphosate.

Fourth, when Lundquist and Walters conceived of the '798 claims is irrelevant because whenever their conception occurred, the '798 patent could not claim any more than what was disclosed by Lundquist and Walters in their April 1990 application. Thus, Lundquist and Walters' disclosure was locked-in as of April 1990 and whatever claims they receive from the PTO must be supported by that disclosure, regardless of their conception date. That disclosure does not include anything contributed by RPA's purported joint inventors and did not change from 1990 to 1995.<sup>4</sup>

Fifth, although RPA focuses on Lundquist and Walters' express disclosure of a bacterial EPSP synthase gene, Monsanto's single mutant maize EPSP synthase was also known to those of skill in the art as of 1990 and was subsequently shown to provide glyphosate resistance. The fact that the claims were later amended to encompass "EPSP synthase" instead of "bacterial EPSP synthase" did not and could not have added "new matter" because (1) an amendment broadening

a claim does not add new matter,<sup>5</sup> and (2) the examiner concluded that a "bacterial EPSP synthase" gene as disclosed encodes "EPSP synthase" as claimed. Indeed, the examiner determined that the bacterial EPSP synthase gene disclosed by Lundquist and Walters in 1990 provided sufficient glyphosate resistance in fertile transgenic plants to support issuance of the '798 patent claims.

Sixth, RPA's argument that Lundquist and Walter did not conceive of the entire claim because "[n]either named inventor had ever worked with any EPSPS gene or any other glyphosate resistant genetic material prior to their patent applications," RPA Br. at 46, is irrelevant. The patent laws do not require that an inventor have actually made the invention before it may be patented. See *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 60-61 (1998) ("It is well settled that an invention may be patented before it is reduced to practice.").<sup>6</sup> Moreover, the issue is what did Lundquist and Walters disclose in their 1990 and identical 1995 patent applications as read by one of ordinary skill in the art, not what did Lundquist and Walter actually work with in the lab.

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<sup>4</sup> Because it is undisputed that the 1995 continuation application did not add any new matter to the April 1990 BioTechnica application (in fact they are identical), the 1995 application is to be given the April 1990 filing date. See *Johnson Worldwide Assoc. v. Zebco Corp.*, 175 F.3d 985, 993-94 (Fed. Cir. 1999) (rejecting Zebco's argument that continuation application patent was not entitled to benefit its parent application's filing date under 35 U.S.C. § 120 where Zebco, like RPA here, did not contend that the applicant added new matter to the continuation application); *Studiengesellschaft Kohle, M.B.H. v. Shell Oil Co.*, 112 F.3d 1561, 1564 (Fed. Cir. 1997); *Waldemar Link, GmbH & Co. v. Osteonics Corp.*, 32 F.3d 556, 558 (Fed. Cir. 1994) ("matter disclosed in the parent application is entitled to the benefit of the filing date of the parent application."); *Litton Sys. v. Whirlpool Corp.*, 728 F.2d 1423, 1438 (Fed. Cir. 1984) ("The earlier filing date of the parent application pertains to material in the CIP application also disclosed in the prior application.")

<sup>5</sup> 35 U.S.C. § 132 ("No amendment shall introduce new matter into the disclosure of the invention"); see also *In re Rasmussen*, 650 F.2d 1212, 1214 (CCPA 1981) ("Broadening a claim does not add new matter to the disclosure.")

<sup>6</sup> Amending the claims to cover a competitor's product is fully appropriate so long as the claims are supported by the specification. See *Kingsdown Med. Consultants v. Hollister, Inc.*, 863 F.2d 867, 874 (Fed. Cir. 1988).

**B. RPA Failed To Establish A Significant Contribution To The Inventions Claimed In The '798 Patent**

RPA asserts that its scientists made a significant contribution to the '798 patent claims. RPA Br. at 60-63. However, as noted above and in DEKALB's proposed findings/conclusions, RPA's scientists could not have made any contribution to the claimed inventions, much less a significant one. The claims are based upon a disclosure filed with the PTO on behalf of Lundquist and Walters in 1990, years before RPA alleges it made its contributions. There is not a single sentence in the entire specification that reflects work done by RPA.

As shown at trial, there were other genes in the art that would encode EPSP synthase to impart glyphosate resistance to plants in 1990. Lundquist and Walter enabled scientists to put those genes into corn to make fertile transgenic corn. The evidence at trial indicated that at least two of the prior art genes produced EPSP synthase that resulted in corn that demonstrated resistance to glyphosate.<sup>7</sup> Moreover, as set forth in DEKALB's proposed findings/conclusions, the art contained the sum of RPA's contribution except for the two mutations that Comai disclosed to RPA's scientists.

**C. The "Contribution" By RPA's Purported Joint Inventors Cannot Support RPA's Joint Inventorship Counterclaim**

RPA discusses its "joint contribution," RPA Br. 63-64, however, there is nothing "joint" about RPA's purported contribution. As set forth in DEKALB's proposed findings/conclusions, RPA cannot establish co-inventorship because its purported joint inventors had absolutely

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<sup>7</sup> The resistance was demonstrated in that the plants containing the transgene showed less harm under an application of glyphosate when compared to plants that did not contain the transgene. Indeed, that same type of data was submitted to the PTO and resulted in the allowance of the '798 patent claims. DEKALB maintains that the Court's claim interpretation is incorrect and erroneously excludes the very EPSP synthase gene explicitly disclosed in the '798 patent. See *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996); *Modine Mfg. Co. v. U.S. Int'l Trade Comm'n*, 75 F.3d 1545, 1550 (Fed. Cir. 1996); *Hoechst Celanese Corp v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996).

nothing to do with Lundquist, Walters, BioTechnica, or what is reflected in Lundquist and Walters' 1990 application – the same disclosure that must support the '798 patent claims.

RPA argues that Lundquist and Walters contributed transformation techniques to make fertile transgenic corn and that RPA's purported joint inventors contributed genetic constructs to impart glyphosate resistance. RPA then asserts that those "two prongs of the invention" were put together by DEKALB's personnel. RPA Br. at 64. But, those two prongs were never put together in the '798 application. The '798 specification was never amended to add information about any of the alleged contributions that RPA claims to have made. RPA's argument ignores the facts that (1) in 1990 Lundquist and Walters, while at BioTechnica disclosed using a gene that encodes an EPSP synthase to make a fertile transgenic corn plant that was glyphosate resistant, (2) in 1990 when Lundquist and Walters filed their patent application, the art had numerous constructs for making the plants that could be transformed at the time glyphosate resistant, (3) Lundquist and Walters filed their patent application and thus their complete disclosure before DEKALB acquired BioTechnica, and (4) Lundquist and Walters, who were both employed by BioTechnica before they filed their patent application, did not work under common direction with any of the RPA purported joint inventors.

In all of the correction of inventorship cases cited by RPA, the named inventors and the purported new inventors worked together, either for the same company or under common direction. Here, that is simply not the case. RPA has not cited any support for its novel theory that an individual who makes a contribution after a patent application was filed can somehow be named as a joint inventor on claims that issue from that application. Furthermore, RPA has not cited any support for its similar theory that an individual who is a complete stranger to the named inventors and to the company that filed the application on behalf of the named inventors should

somehow be named as a joint inventor on a patent that issues from that application. As detailed in *Kimberly Clark* (discussed in DEKALB's proposed findings/conclusions) the law is squarely to the contrary.

### III. CONCLUSION

For the reasons set forth above, in DEKALB's Post-Trial Proposed Findings Of Fact And Conclusions Of Law, and in DEKALB's arguments and evidence presented at trial, the Court should enter judgment denying RPA's joint inventorship counterclaims for the '798 and '497 patents.

Respectfully Submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that I caused a copy of the foregoing document entitled **DEKALB'S RESPONSE TO RPA'S POST-TRIAL BRIEF OF FINDINGS OF FACT AND CONCLUSIONS OF LAW** to be served on October 6, 2000 via facsimile (without exhibits) and overnight delivery upon:

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